



ELECTROSTATIC

DISCHARGE CONTROL

DOU YEE
E N T E R P R I S E S



GLOBAL CAPABILITY • LOCAL FOCUS

Established in 1982, Dou Yee is a global premier total industrial solutions provider, serving with distinctions the semiconductor, data storage and electronic industries.

Dou Yee specializes in the manufacture of electronics packaging materials with static discharge and humidity control properties, cleanroom apparel and footwear, among others.

The comprehensive range of products makes Dou Yee a convenient one-stop industrial provider. With a worldwide business network of more than 46 international branches and representative offices, the company's manufacturing plants located in Singapore, Malaysia (Seremban), China (Suzhou), France and Poland are governed by consistent quality systems with ISO 9001:2015 and ISO 14001:2015 certifications.



MISSION STATEMENT

We aim to become the worldwide leading provider of industrial solutions in the semiconductors, data storage and electronics sector. We provide services that are of the highest standards, and quality products to our valued customers.

ELECTROSTATIC DISCHARGE CONTROL



YOUR PERFECT PARTNER IN ESD
CONTROL SOLUTIONS.

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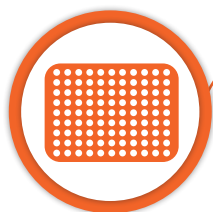
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INTRODUCTION

- Generation of Static Charges
- Triboelectric Series
- Problem Caused by Static Charges
- Solutions

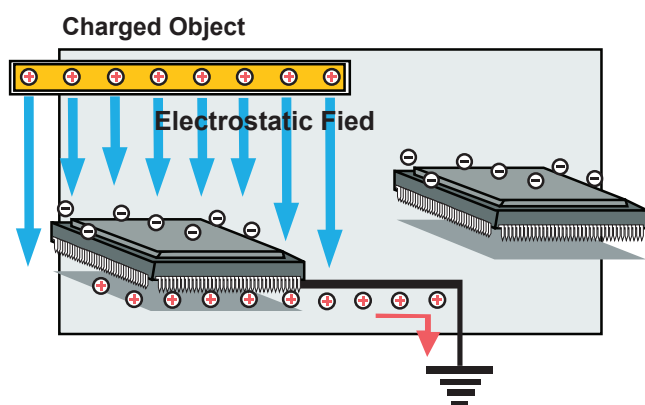
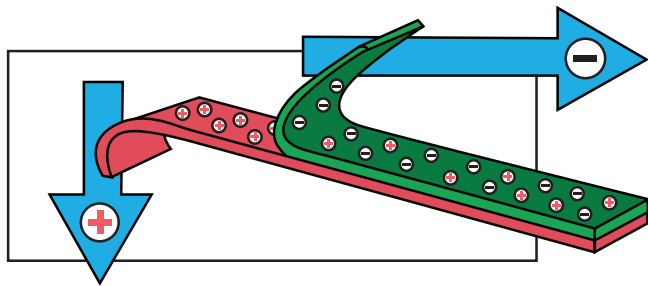
GENERATION OF STATIC CHARGES

Triboelectrification:

Any material, whether a conductor or non-conductor, can be charged triboelectrically. The magnitude and polarity of the charge depends on the characteristics of the two materials. They are affected by several factors, such as the surface condition, size of the contact area, speed of separation or rubbing etc.,

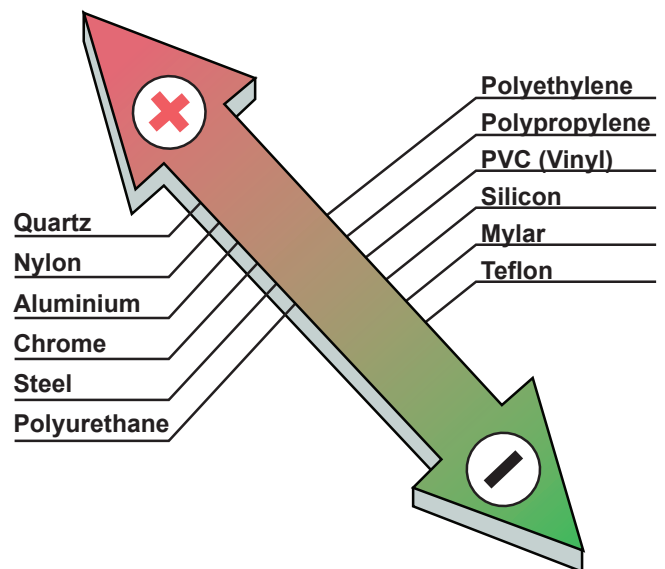
Induction:

Static Charge present on an object creates an electrostatic field. When a conductive object is placed within the electrostatic field and connected to the ground, it takes on a static charge of opposite polarity to the original charged object.



TRIBOELECTRIC SERIES

The triboelectric series is a ranking of materials in the order of their likelihood of becoming positively or negatively charged. If two materials listed on the chart contact and separate, the one higher on the list will become positively charged. The better the insulator, the easier it is charged by friction.



PROBLEMS CAUSED BY STATIC CHARGES

Contamination:

Materials used in the cleanroom are typically good insulators which accumulates charges effortlessly. As such, once these particles are bonded to a charged surface, it will be very difficult to remove these particles. Contamination of this nature is a major contributor to product degradation and device failure.

Destruction of Sensitive Devices:

ESD can cause electronic device failure during any phase in the production, packaging and testing processes. As the critical dimensions and tolerance of components and circuits become progressively smaller, they become less tolerant to ESD.

SOLUTIONS

It is impossible to eliminate static electricity from production environments. However, we can control the problem by implementing the following solutions:

1. ESD Control Facilities:

To reduce the risk of ESD damage by 3 basic steps:

Prevention		Use ESD-Safe material to reduce static charge generation
Protection		Use protective material with Faraday Cage shielding effect during storage and transportation
Elimination	Grounding	Create a path for charges to migrate from conductive objects/ human bodies to ground
	Neutralisation	Create air ions to neutralize charges on both insulators and isolated conductors

2. Awareness/ Training

The sustained success of an ESD control program is heavily dependent on personnel that fully understand the extent of the ESD program. Training is essential for all personnel at all levels. ESD awareness must be maintained in ESD-sensitive areas.

3. Enforcement

Extensive awareness training makes it easier to enforce ESD control program requirements. However, it is still necessary to establish formal and realistic enforcement procedures to reinforce the point that ultimately, these responsibilities lie with everybody.

4. Testing Regulations

To ensure compliance on ESD control program, ANSI ESD S20.20 standard provides guidance on a list of test methods to various ESD control items. The required control items and test methods are listed in the below table:

Table 4.1

ESD Control Item	Test Method
Work Surface Resistance	ANSI/ESD STM4.1
Wrist Strap Cord	ANSI/ESD S1.1
Wrist Strap Cuff	ANSI/ESD S1.1
Footwear	ANSI/ESD STM9.1
Foot Grounders	ANSI/ESD SP9.2
Flooring	ANSI/ESD STM7.1
Seating	ANSI/ESD STM12.1
Ionization	ANSI/ESD STM3.1
Shelving	ANSI/ESD STM4.1
Mobile Equipment	ANSI/ESD STM4.1
Garments	ANSI/ESD STM 2.1
Personnel System Resistance	ANSI/ESD STM 97.1
Personnel System Charging	ANSI/ESD STM 97.2
Packaging Standard	ANSI/ESD S541
Surface Resistance	ANSI/ESD STM 11.11
Volume Resistance	ANSI/ESD STM 11.12
Point to Point Resistance	ANSI/ESD STM 11.13
Discharge Shielding	ANSI/ESD STM 11.31

PACKAGING

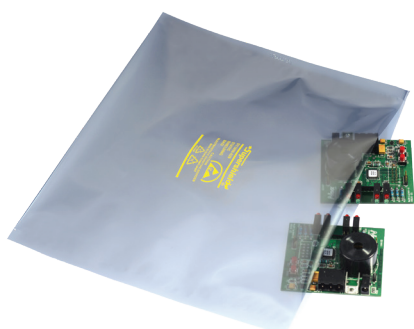
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- Antistatic Utility Tape
- ESD Grid Tape
- Floor Marking Tape With ESD Logo
- Vacuum Sealer
- Strapping Machine

SUPERSHIELD® Static Shield Bag

Product Code: DY3650

SUPERSHIELD® Static Shielding Bag is a static dissipative metalized bag designed to provide superior protection for sensitive electronics devices. Thickness available from 2mils to 3.4 mils, offering competitive pricing for different applications.

- Faraday cage created to protect sensitive products from electrostatic discharge
- Customizable sizes and thickness upon request
- Customizable printing upon request
- Customizable easy tear upon request
- Printed with ESD awareness logo and date code for traceability
- Bags are RoHS compliant

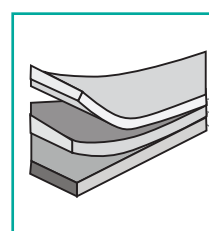


Static Shielding Bag

Typical Value

Property	Value
Thickness (ASTM D374)	2 mils (DY3660) 2.5 mils (DY3655) 3 mils (DY3650) 3.4 mils (DY3692)
Surface Resistance - Both surfaces (ANSI/ESD-STM-11.11)	< $10^{11} \Omega$
Static Shielding (ANSI/ESD-STM-11.31)	< 15nJ

Construction Of ESD Safe Bags



METAL-IN BAGS

- Static Dissipative Polyester
- Aluminium
- Static Dissipative Polyethylene



Static Shielding Bag

SUPERBARRIER® Moisture Barrier Bag

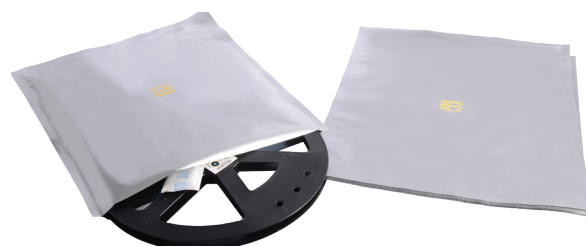
Product Code: DY3008

Multilayer barrier bags offering superior protection against moisture, corrosion and shielding for sensitive components. SUPERBARRIER® Moisture Barrier Bag is available in both metallized and foil grades.

- Packaging of electronic components under vacuum or inert gas immediately after production
- Heat sealable
- Free from amine and amide
- Low outgassing and excellent protection from corrosion
- Customizable sizes and printing
- Other Non-ESD grade moisture barrier bags available
- Bags are RoHS compliant



Moisture Barrier Bag



Moisture Barrier Bag

Static Shielding Zip-Lock Bag

Product Code: DY3700

A static shielding/moisture barrier bag equipped with high quality zipper to allow reclosable function to serve as an alternative packaging solution. Highly recommended for use in manufacturing environments where the bag needs to be reused for various processes and/or locations.

- Customize printing upon request
- Customizable to sizes as small as 2 inches opening and 3 inches length
- Quick and tight closing provides secure protection during transportation



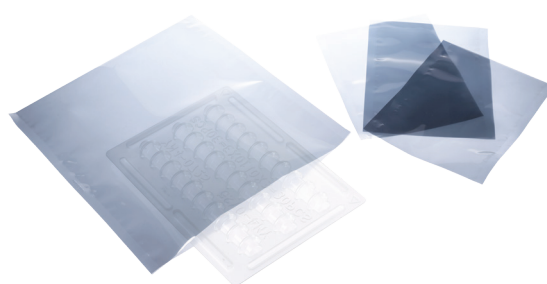
Zip-Lock Bag

Clean Bag

Product Code: DY3800

The DY3800 Clean Bag is ideal for protecting electronic devices where particle contamination is undesirable.

- Available in different grades
- Cleanroom control manufacturing environment
- Customizable sizes upon request
- Emboss lot code for traceability
- Highly compatible with data storage and semiconductor industries requirements



Clean Bags

Moisture Barrier Box Bag

Product Code: DY3900 / DY3950

This Moisture Barrier Box Bag is designed to accommodate wafer shipping boxes and JEDEC tray sizes in mind. Converted from static shielding or moisture barrier materials, it serves as an alternative packaging solution.

- Wide opening and added dimensions to house products that are too bulky to pack using conventional sealing.
- Highly recommended as a box liner for bulk packaging.
- Customizable printing and sizes upon request



Moisture Barrier Box Bag

Anti-Static & Conductive Packaging Bag

Product Code: DY3002/ DY3003/ DY3004

These bags are made from polyethylene material that has excellent mechanical property and static shielding capabilities (for conductive bags only). The package and contents are kept at equal potential so that the accumulated charges can be drained away safely without damaging the contents.



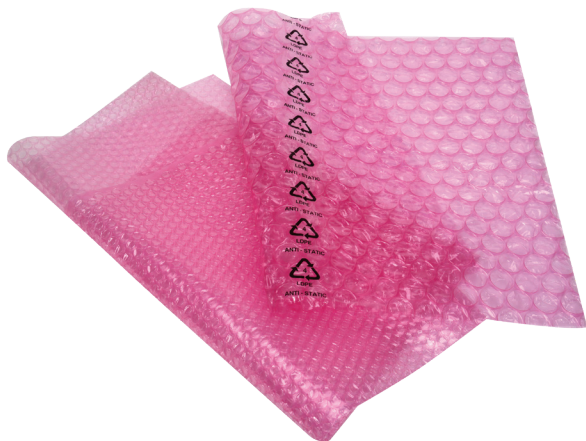
Anti-Static Bubble Wrap

Product Code: DY3004-AB

Designed with general packaging and cushioning functions, this inexpensive bubble wrap/bag offers complete protection of parts during transportation.

Bubble Size Option: Ø10 mm / Ø25 mm

Layer Option: Single / Double



Volatile Corrosion Inhibitor (VCI) LDPE Bag

Product Code: DY3111

Designed to protect metal components from corrosion during storage, handling, and transportation, our VCI LDPE Bags provide a clean, dry, and effective corrosion prevention solution without the need for oils. The integrated VCI technology continuously releases corrosion-inhibiting molecules that form a protective molecular layer on exposed metal surfaces, safeguarding ferrous and non-ferrous metal.



Conductive / Static Dissipative Packaging Foam

Product Code: DY4000 / DY4001

A wide range of Conductive / Static Dissipative Foams with different densities and cell-structures are available for applications. This carbon-impregnated material provides permanent and uniform protection for ESD sensitive devices. It is ideal for long-term packaging of semiconductor components because of its low ionic contamination.

- Surface Resistance: $10^3 - 10^6 \Omega$



PE/PU/EVA

Pink Antistatic Packaging Foam

Product Code: DY4300

This inexpensive foam has antistatic properties designed for general packaging and cushioning functions for ESD sensitive products.



PE / PU Foam

End Caps for Tray

Product Code: DY5004 / DY4300 / DY5003

Static Dissipative End Caps are used to cover the stacks of JEDEC trays to secure and protect trays during shipment.

They are used in conjunction with Conductive / Static Dissipative PP Straps for added security.

End Cap sizes can be customized to suit different packing requirements

- Surface Resistance: $> 10^4 \Omega$ to $< 10^{11} \Omega$



1. Black Static Dissipative PP
2. Pink Anti-Static EPE Foam (Closed Cell)
3. Pink Anti-Static Beaded EPE Foam
4. Vacuum-formed Conductive PP

High Temperature Resistant PP Strap

Product Code: Z2-999-SD-STRP

Static dissipative PP straps are specially designed to pack ESD sensitive items firmly through strapping action. It is compatible with most of the conventional strapping machines.

- Size: 9mm x 1200m/ 12mm x 1500m or customized width and length
- Thickness: 0.7mm $\pm$ 0.1mm or customized thickness available
- Surface Resistance: 10^5 to $10^6 \Omega$ or $< 1 \times 10^9 \Omega$
- Temperature Resistance: 150°C

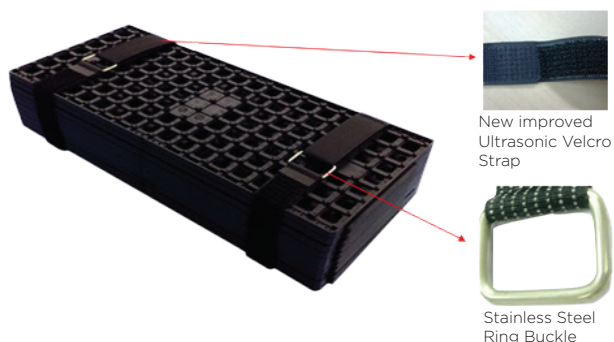


Black Static Dissipative PP

ESD-Safe Velcro Strap

Product Code: DY7080-BD

Designed for electrostatic discharge (ESD) sensitive environments, ESD-Safe Velcro Strap provides a reliable and reusable solution for bundling, organizing, and securing cables, components, JEDEC trays and equipment without generating harmful static electricity. Bakeable up to 150°C, 72hrs and customizable lengths for each application.



Antistatic Utility Tape

Product Code: DY8200-AS-PE

This Aluminium-Metalized PET tape does not generate static within the decay rates of MIL B-81705. It also has an acrylic adhesive ESD treated, and is commonly use in the cleanroom and ESD sensitive areas.



Plastic PE Core

ESD Grid Tape

Product Code: DY8200-CP

This conductive biaxially oriented polypropylene packaging tape is protected between two copolymer layers and has an effective static shielding ability. The conductive grid tape offers reliable protection for any sensitive devices otherwise being damaged by normal insulative tape.



Plastic PE / Paper Core

Floor Marking Tape With ESD Logo

Product Code: DY8200-FMT

PVC tape, printed with the ESD Logo and "ESD Protected Area", is used for floor marking in EPA (Electrostatic Protected Area).

The logo comes with additional layer of protection for prolonged resistance against wear and tear.



Plastic PE Core

Vacuum Sealer

Product Code: DY3303

Vacuum sealers are essential to ensure proper sealing in vacuum environment. It protects ESD products against humidity oxidization, dust and corrosion.

With various vacuum sealer configuration and multiple memory functions, vacuum sealers can cater for a diversified range of sealing needs.

- Gas flushing and purging function available
- Double heating element for sealing thick bags available
- Stainless steel body for anti-corrosion
- Suitable for EPA environment
- Cleanroom models (with exhaust) available
- Electric Motor Vacuum Sealer Models Available (No Compressed Air Required)
- Each unit comes with a maintenance kit

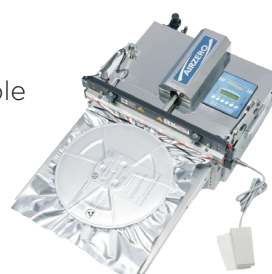


Table Top Vacuum Sealer



Table Top Vacuum Sealer Unit with Stand



Electric Motor Vacuum Sealer



Vertical Vacuum Sealer



Chamber Vacuum Sealer



Table Top Chamber Vacuum Sealer

Strapping Machine

Product Code: Z2-999



Semi-Automatic Strapping Machine (iQ-400)

- Durable & Heavy Duty
- Quiet to Operate and suitable for office use
- Low Operating & Maintenance Cost
- Suitable for 5mm to 15.5mm straps
- Dual Tension Mode to suit more variety of application



Compact Automatic Strapping Machine (SQ-800IR)

- Compact Body for a Automatic Strapping Machine with Internal Reel Unit
- Self-Loading, Refeed & Loop Ejection
- Increased Packaging Efficiencies (54 straps/min)
- Low Operating & Maintenance Cost
- Self-Lubricating Design to reduce wear & tear & to increase operation life of machine
- Suitable for 5mm to 15.5mm straps

STORAGE & SOLUTIONS

- Customizable Corrugated Box
- Part Bin
- Conductive PCB Rack
- PCB Storage Solution
- Conductive Container
- Small Lid Box
- Thermoformed Tray
- Single Waferframe or Wafer Hoop Ring Carrier or Shipper
- Green Sustainable Material Tray

Customizable Corrugated Box

Product Code: DC2002

Storage boxes can be fabricated with corrugated polypropylene (PP) plastic sheets which are durable, water resistant, light-weight and economical. They can be customized to your required sizes/ designs and even suit a wide range of applications. These boxes will not be completed without our variety of ESD safe accessories (Covers, frames, cardholders etc.)

Properties	Value
Material	-Conductive (DC2002) -Static Dissipative (DC2006) -Antistatic (DC2003) -Normal (DC2001) -Conductive Honeycomb (DC2008)
Material Thickness	2mm - 6mm
Surface resistance (ESD material and accessory) ANSI/ESD STM11.11	$10^3 - 10^{11} \Omega$



Configurations of ESD corrugated box

1. Covers (Detachable/non-detachable)



2. Partitions

- Foam supports
- Vacuum formed trays support

3. Latches

- Metal latch
- Velcro

4. Reinforced Frames

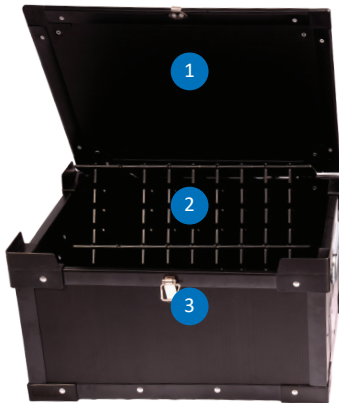
- Static dissipative PS
- Aluminum

5. Label

- ESD Card Holders
- Print
- Sticker Labels

6. Handle

- Type A: General Application
- Type B: Easy Handling
- Type C: Heavy Duty
- Type D: Encased Design
- Type E: Extended Profile



Scan QR Code
for E-catalogue

★ Contact our Dou Yee Team to start planning for your storage solution.

Part Bin

Product Code: DY2006

Static dissipative part bins are ideal for storing electrostatic sensitive devices. They can be used with assembly racks to create an organized grounded storage system.

- Surface resistance: $< 10^6 \Omega$
- Sizes available

★ Normal type available if requested.

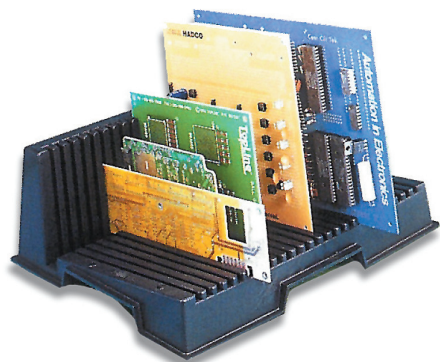


Conductive PCB Rack

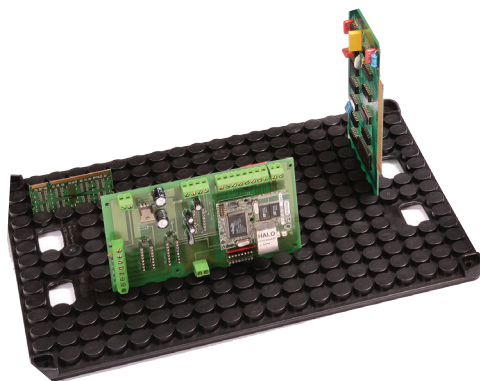
Product Code: DY2005 / DY2007-WEZ

Our Conductive PCB Racks are made for handling, clinched, SMD, soldered and bare boards of any sizes with no adjustments required.

Different sizes and design are available for a wide variety of applications.



WEZ PCB Holder



Static dissipative PCB Holder



PCB Holder

PCB Storage Solution

Product Code: DY2007

PCB of all sizes are held simply and safely with WEZ circuit board holders. There are various sizes available to suit different BlackLine containers, ensuring good protection in a visible and organized manner throughout production, testing and storage.



WEZ Blackline Containers

PCB Storage Solution

Product Code: DY2004-NIKKO

Nikko Magazine rack, made in Japan, with exceptional accuracy for high quality and great durability. Comes with withstand temperature 60°C, 135°C and 165°C. Enables easy and accurate width adjustment with continuous parallel movement system (Rack & Pinion) in just five seconds. Compatible with standard specifications of SMT equipment manufacturers.



Nikko Rack

Conductive Container

Product Code: DY2007 - WEZ



With the growing need to protect complex printed circuits from ESD, the only sensible policy to adopt is one of prevention. WEZ BlackLine conductive Injection Molded Containers cater to protection from ESD throughout all phases of manufacturing and logistic.

- Storage box/ carrying cases available
- Surface resistance: $< 10^6 \Omega$
- High impact strength and high loading (15kg to 65 kg)
- Operating temperature from -20°C to 80°C



★ Contact our Douyee team to start planning for your storage solution.

Small Lid Box

Product Code: DY2007



ESD-safe box come with lids, suitable for storage and transportation of small electronic components. Each size can come with foam inserts, closed cell foam insets and chip boxes with film hinge.

- Surface resistance: $< 10^6 \Omega$



★ Various container sizes and configurations available. Please contact us for more details.

Thermoformed Tray

Product Code: DY5003

Dou Yee has developed customize packaging and shipping thermoformed trays, which are ideal for most internal and external transportation needs for the semiconductor, electronics and medical industries. We control all aspects in terms of the design and manufacturing process, having our own R&D, engineering tooling and QA departments.



Conductive ABS Tray

Tougher and stiffer material as compared to HIPS material and it has higher withstand temperature at 80-90°C. Suitable material for internal re-usable trays for its durability.

Thickness: 0.3mm - 2mm

Surface Resistance: $<10^6\Omega$



Antistatic PP Tray

Economical Ideal for trays with good durability and temperature resistance

Thickness: 0.3mm - 1.2mm

Surface Resistance: $<10^{11}\Omega$

Maximum tray dimensions: 700 x 500mm

Non-antistatic is available



Static Dissipative PETG Tray

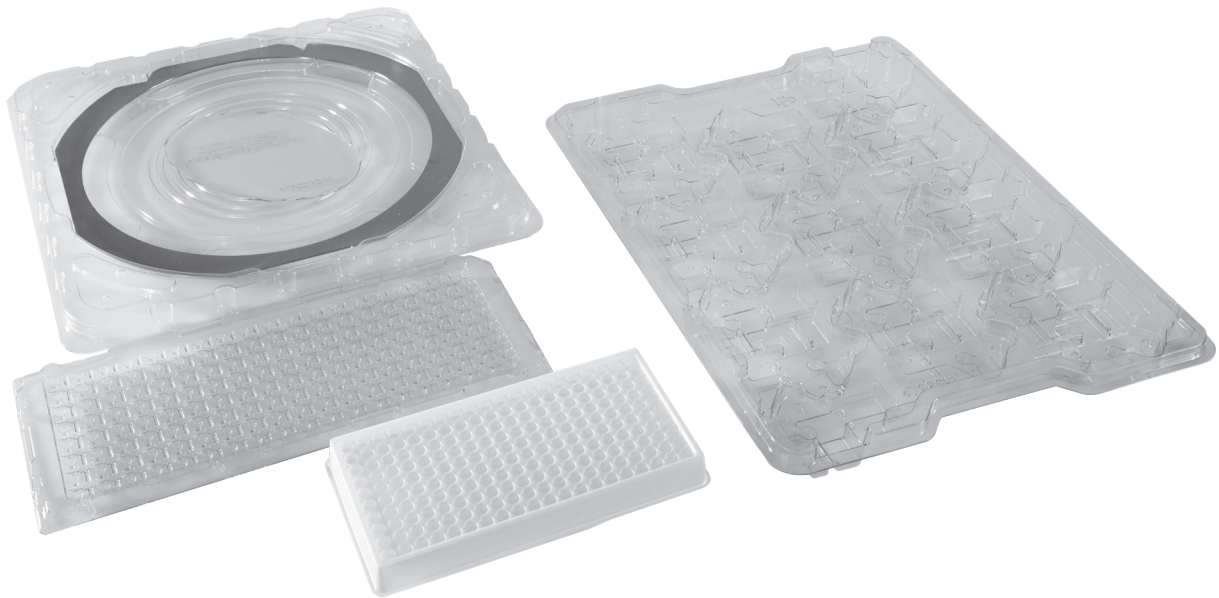
Suitable for packing sensitive and medical devices and cleanroom compatible

Thickness: 0.5mm - 2mm

Surface Resistance: $10^7 - 10^{10}\Omega$

Maximum tray dimensions: 700 x 500mm

Non-antistatic is available



Antistatic APET Tray

Ideal for trays, lids and blister packs

Thickness: 0.3mm - 1.5mm

Surface Resistance: $< 10^{11} \Omega$

Maximum tray dimensions: 700 x 500mm

Non-antistatic is available

Static Dissipative APET Tray

Surface resistance is humidity independent and providing a more stable ESD protection

Thickness: 0.3mm - 1.2mm

Surface Resistance: $10^4 \Omega$ to $< 10^9 \Omega$



Conductive and Antistatic HIPS Tray

Common and price competitive material with excellent shielding properties

Thickness: 0.3mm - 2.0mm

Surface Resistance: $10^4 - 10^{11} \Omega$

Maximum tray dimensions: 700 x 500mm

Non-antistatic is available

★ Contact our Dou Yee Team to start customizing for your storage solution.



Single Waferframe or Wafer Hoop Ring Carrier or Shipper

Product Code: DY5003-SWC/WFCDY/WHRC DY

Design to provide secure protection and reliable handling for individual wafer frames or wafer hoop rings during storage, transportation, and manufacturing processes.

Waferframe Single Carrier : 5 / 6 / 8 / 12 inch

Material : Conductive HIPS or Static Dissipative Clear APET

Wafer Hoop Ring Single Carrier : 6 / 8 inch

Material : Conductive HIPS or Static Dissipative Clear APET

Green Sustainable Material Tray

Product Code: DY5003

Suitable proposal for green sustainability projects to reduce carbon footprint and environmental concerns.

Thickness: Subjected to availability

Post Consumer Recycled (PCR) APET (GRS Grade)

The Global Recycled Standard (GRS) is a voluntary product standard for tracking and verifying the content of recycled materials in a final product.

The standard applies to the full supply chain and addresses traceability, environmental principles, social requirements, chemical content and labeling.

Up to 30% of the GRS-grade material can be added into virgin APET to increase recyclability rate.



WORKSTATION & GROUNDING

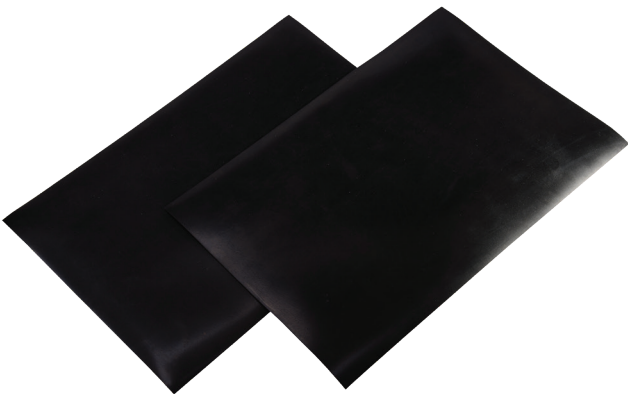
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- Static Dissipative Vinyl Mat
- Static Dissipative Rubber Mat
- Static Dissipative Low Halogen Table Mat
- Static Dissipative Metallized / Carbon Grid Sheet
- Static Dissipative DC Plate (Perspex)
- Static Control Heel Grounder
- Static Control Wrist Strap
- Grounding Component

Black Conductive Rubber Mat

Product Code: DY1001

A flexible and durable conductive mat, specially designed for ESD sensitive areas. Can be used as table or floor mat.

- Surface resistance : < 10⁵Ω (ANSI/ESD STM4.1)
- Dimension : 1m (width) x 10m (length) x 1.6mm (thickness)

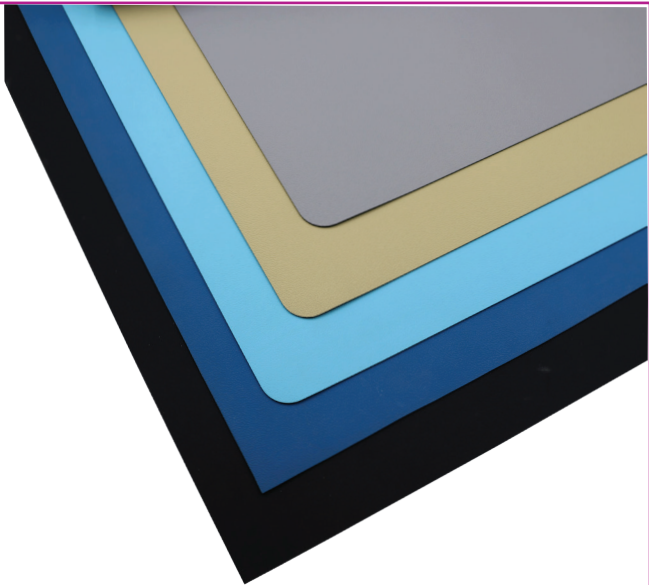


High Temperature Static Dissipative Rubber Mat

Product Code: DY1003-HT002

- Colour Dissipative Upper Layer / Black Conductive Bottom Layer
- Easy to clean, high durability and high temperature resistant
- Dimension : 1.0m / 1.22m (width) x 10m (length) x 2.1mm (thickness)

Temperature Chart	
200°C	OK
250°C	OK
300°C	Slight Discoloured
350°C	Discoloured
400°C	Burnt



Static Dissipative Vinyl Mat

Product Code: DY1003-GD12-BLUE

Made of refined high-elastic PVC, this vinyl composite has a tough top and cushioned bottom. It allows energy absorption for components susceptible to physical shock and fatigue resistance.

- SurfaceResistance:10⁷to10¹⁰Ω(ANSI/ESDSTM4.1)
- Thickness : 0.125in (3.2mm)
- Dimension : 1.2m (width) x 10m (length)

Customizable roll size available



Static Dissipative Rubber Mat

Product Code: DY1003

These static dissipative mats consist of two laminated layers.

- Colour Top Layer : provides static-free surface for highly ESD sensitive operations (Static Dissipative, Surface resistance $< 10^9 \Omega$) (ANSI/ESD STM4.1)
- Black Bottom Layer : allows static charge to be drained away effectively (Conductive, Surface resistance $< 10^5 \Omega$) (ANSI/ESD STM4.1)
- Dimension : 610x10,000mm and 1,000x10,000mm (2mm thickness)

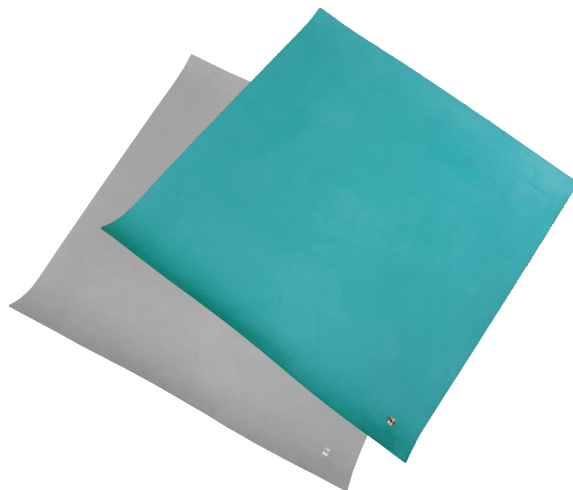


Static Dissipative Low Halogen Table Mat

Product Code: DY1003-HF

Low Chlorine content < 1000 ppm and suitable for production workshops and advanced laboratories of microelectronics industries such as electronic semiconductor devices, electronic computers, electronics communication equipment and integrated circuits.

- Dimension : 1.0m x 10m



Static Dissipative Metallized/ Carbon Grid Sheet

Product Code: DY1006-ME/GD/UV

Excellent and Permanent Antistatic Performance

Made from polyvinylchloride mixed conductive plasticizer. Surface resistance is $10^9 - 10^{10}$ that prevents the accumulation of electrostatic charge.

Excellent Flame Retardant

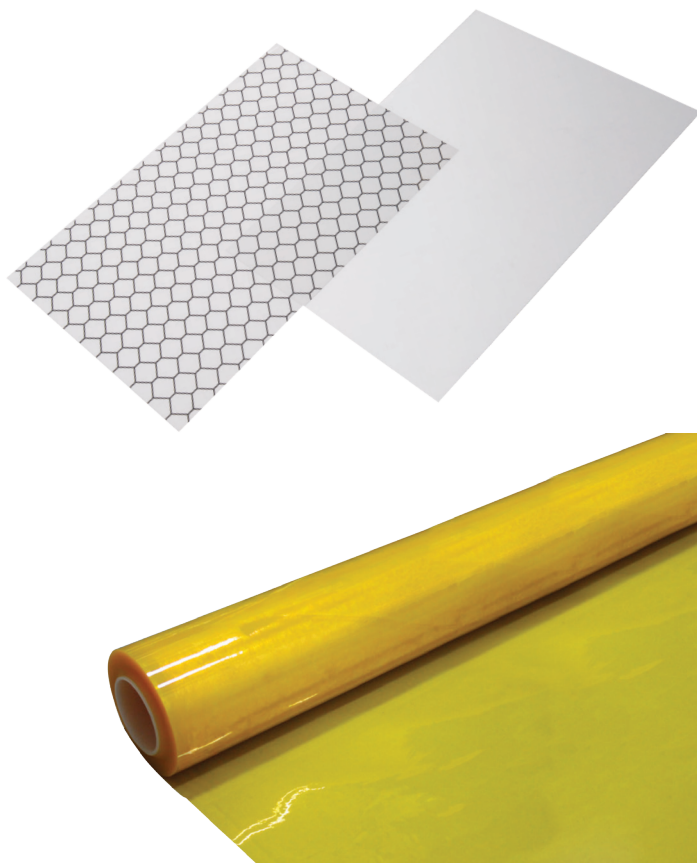
They have self extinguishing performance and they are recognized as flame retardant goods.

Excellent Transparency and UV protection

Used for blocking ultraviolet radiation or light with anti-static function

Excellent Fabrication Ability

It is possible to weld easily with high frequency heating welder.



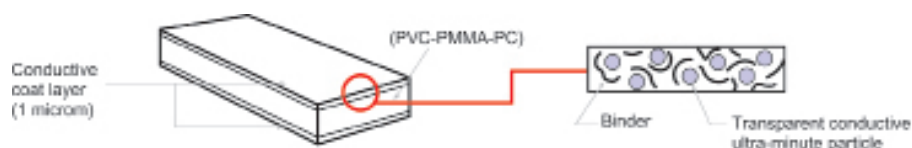
Static Dissipative DC Plate (Perspex)

Product Code: DY1005

ESLON Static Dissipative DC Plate has excellent metal coating strength which meets the JLS-K 5400 standard. It has permanent static dissipative characteristics with low triboelectrical charge generation and resistance to most cleaning solvents. It does not attract dust or floating particles and it is most suitable for clean room application.

- Standard size : 1000 x 2000 mm & 1212 x 2424 mm
- Thickness : 1, 2, 3, 4, 5, 6, 8, 10 & 15 mm
- Colour : clear, smoke-brown, orange, yellow
- Surface Resistance : $10^6 - 10^8$ (ANSI/ESD STM 11.11)
- Application : Cleanroom Partitions, Apparatus, Equipment Cover, Work Station Materials and Draft Chamber etc

Eslon DC Plate has a conductive surface coating on both sides of base plastic plate.



Material Code	Description	Feature
U	μPVC	General Application
P	PMMA	Excellent Optical Property
C	Polycarbonate	Excellent Heat & Mechanical Property, Low Outgassing
HC	Hard Coat	Improved Scratch Resistant



SEKISUI

Static Control Heel Grounder

Product Code: DY7006

This reusable heel grounder is made of conductive rubber with adjustable hook and loop strap and conductive polyester ribbon for body contact. It provides safe and reliable grounding between mobile personnel and conductive flooring.

- For the use of mobile personnel when wrist straps are not practical.
- Heel grounder must be used with properly grounded floors.
- Use heel grounders on both feet for proper grounding.
- Disposable heel grounds are also available



DY7006-02-REV-A



DY7006-08



DY7006-1.5M-EUROSTAT

Description	Specification	Typical Value	Test Method
Foot Grounder Resistance	$< 1.0 \times 10^9$ ohms	1.0×10^6 ohms ($\pm 20\%$)	ANSI/ESD SP9.2
Foot Grounder System Resistance	$< 1.0 \times 10^9$ ohms	$< 3.5 \times 10^7$ ohms	ANSI/ESD SP9.2

Static Control Wrist Strap

Product Code: DY7000

A wide range of high quality wrist straps designed to meet various requirements. All models come with one mega-ohm resistor to ensure fast and safe discharge of body charges.

- Strong yet flexible for long service life
- Snap fastener on all models with molded-in one mega-ohm current limiting resistor for operator safety
- Stretch and retract memory
- Banana plug as standard; alligator clip included for alternate connection to ground
- Standard coiled wire length: 6ft / 10ft / 12ft / 16ft / 20ft

Elastic Woven Wrist Strap (DY7010)

- Comfortable and stretchable
- Economical



Anti-Allergy Wrist Strap (DY7060)

- Suitable for sensitive skin
- Fabric Woven



Metal Wrist Strap (DY7007)

- Anti-corrosion
- Stainless steel wrist strap



Dual Wire Wrist Strap (DY7008)

- Dual wire wrist strap
- Comes in elastic woven only



Grounding Component

Product Code: DY7000

These universal ground connectors are used at workstations and machines for human grounding through wrist strap. Its unique design allow versatility with various designs wrist strap.



GD101

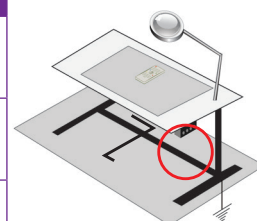


GD124



GD125

Part Number	Details
GD101	Straight ground cord for mats, 10mm snap (male or female), 6ft/10ft/15ft or customized, 1MΩ or without resistor, jack or ring terminal
GD124	Dual common point ground point for wrist straps & mats, 10mm snap (male or female), 6ft/10ft/15ft or customized, 1MΩ or without resistor, jack or ring terminal
GD125	Quad common point ground point for wrist straps & mats, 10mm snap (male only), 6ft/10ft/15ft or customized, 1MΩ or without resistor, jack or ring terminal



APPARELS & FOOTWEAR

- ESD Control Garment Materials
- ESD Control Garment
- ESD Shoes
- ESD Slipper
- ESD Booties
- ESD Insole/ Safety Shoes

ESD Control Garment Materials

Product Code: DY6000

DY6000 Static Dissipative Fabric is made from 100% polyester continuous filament yarns, with electrical conductive fibers interwoven in striped or checked pattern at regular intervals. The cloth material is designed and engineered to exceed cleanroom and ESD requirements. It is durable with excellent washability and comfortable with superior ventilation.

Function

- To suppress human contamination in the cleanroom
- To minimize static charge generation
- To eliminate the possibility of arcing from worker to sensitive electronic products

Applications

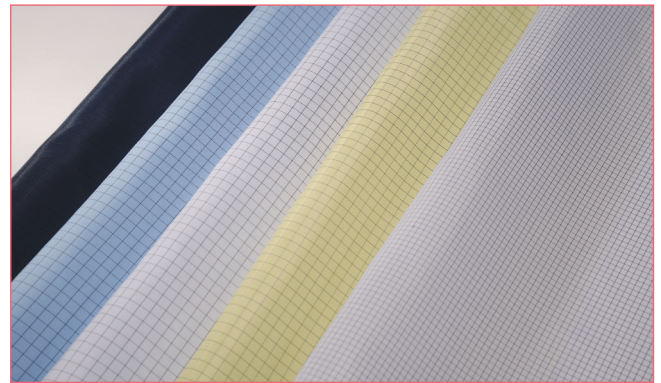
- Data storage, Semiconductors, Electronics, Precision Instruments, Aerospace, Pharmaceutical and Petroleum



Conductive Thread

Length: 5190m /Cone

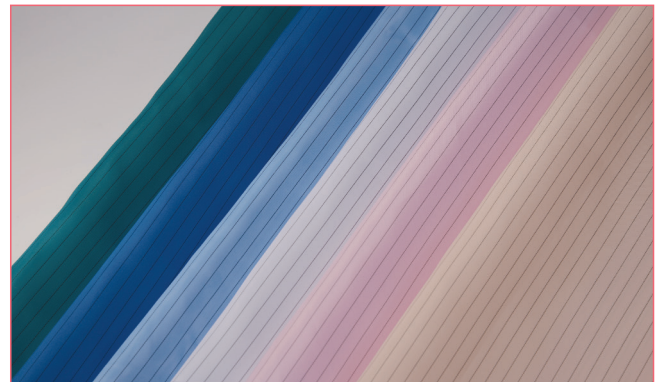
Surface Resistance: 10^3 to $10^4 \Omega$



Static Dissipative Fabric

- GD 5mm Material / GD 2.5mm Material

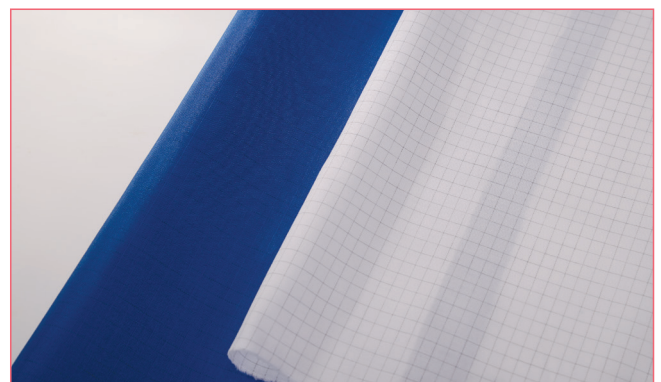
Surface Resistance: 10^5 to $10^6 \Omega$



Static Dissipative Fabric

- ST Material

Surface Resistance: 10^8 to $10^{10} \Omega$



Static Dissipative Cotton

- Polyester Mixed Material

Surface Resistance: 10^5 to $10^8 \Omega$

★ Detail specifications available upon request

ESD Control Garment

Product Code : DY6001

We provide a wide range of Static Dissipative garments available in different designs to suit all kinds of applications. These garments are made with excellent workmanship from our high quality DY6000 garment material. They serve you with the best electrical and physical properties at the most reasonable price.

Customized designs are welcomed

Sizes: XS, S, M ,L ,XL, 2XL, 3XL, 4XL



Jumpsuits



Metal Snap Buttons



Conductive Cuff



Standard Hood



ESD Shoe Cover Booties with Velcro



Cap



Cap



Round Collar



Standard Collar



Labcoats



Smocks



Conductive / Static Dissipative PVC Shoe

Product Code : DY6002



Static control footwear provides the most effective and reliable way to remove static charges from personnel. When used in conjunction with proper flooring, it gives superior control of ESD compared to other grounding methods like wrist straps, which may be less durable and cumbersome to the user.

Function:

- Sizes : 220 - 300mm
- RTG < 35MΩ
- To Minimize Static Charge Generation
- To Drain Human Static Charge Away Through Conductive / Static Dissipative Flooring
- Machine Washable

Resistance of Shoes (ANSI/ESD STM9.1)	Resistance to Ground (ANSI/ESD STM97.1)
< $1.0 \times 10^7 \Omega$ -COND	< $1.0 \times 10^7 \Omega$ -COND
< $1.0 \times 10^9 \Omega$ -SD	< $3.5 \times 10^7 \Omega$ -SD



SH-2T-SD-REV A



SH-2T-COND



SH-4E-II-SD-REV A



SH-4E-II-SD-DB

Econ Grade - Static Dissipative PVC Shoe

Product Code : DY6002



This shoe has a two-piece construction of PVC upper material and a unique one piece molded static dissipative PVC sole.

- Sizes: 220 - 300mm
- RTG < 35MΩ
- Low Cost
- Single Piece Molded Sole
- Excellent Electrical Properties
- Non-Marking, Non-Slip Sole
- Machine Washable

Resistance of Shoes (ANSI/ESD STM9.1)	Resistance to Ground (ANSI/ESD STM97.1)
< $1.0 \times 10^9 \Omega$	< $3.5 \times 10^7 \Omega$



EC-4E-SD



EC-2T-SD

Static Dissipative EPVC (SPU) Shoe

Product Code : DY6002 

This shoe has a two-piece construction of PVC upper and a single piece molded design using Expandable PVC (EPVC/SPU) material.

- Sizes : 220 – 300mm
- RTG < 35MΩ

Resistance of Shoes (ANSI/ESD STM9.1)	Resistance to Ground (ANSI/ESD STM97.1)
< 1.0 x 10 ⁹ Ω	< 3.5 x 10 ⁷ Ω



25-DBL-4E-SD



26-DBL-2T-SD



25-WH-4E-SD



26-WH-2T-SD

Static Dissipative EPVC (SPU) Slipper

Product Code : DY6002 

This is a single piece molded static dissipative Expandable PVC (EPVC/SPU) slipper.

- Sizes : 36/37 - 47/48
- RTG < 35MΩ

Resistance of Shoes (ANSI/ESD STM9.1)	Resistance to Ground (ANSI/ESD STM97.1)
< 1.0 x 10 ⁹ Ω	< 3.5 x 10 ⁷ Ω



18-BL



18-WH

Static Dissipative PVC Boot

Product Code : DY6002 

These booties have a three-piece construction of static dissipative polyester fabric, a PVC upper and a unique one piece molded static dissipative PVC sole. This one-piece sole design allows human body static charges to dissipate via the insole to the ESD safe floor.

- Sizes : 225 - 300mm
- RTG < 35MΩ
- Single Piece Molded Sole
- Excellent Electrical Properties
- Non-Marking, Non-Slip Sole

Fabric Surface Resistance (-GD, 5mm checked)
10 ⁵ to 10 ⁶ Ω



SH-08-SD-GD

Resistance of Shoes (ANSI/ESD STM9.1)	Resistance to Ground (ANSI/ESD STM97.1)
< 1.0 x 10 ⁹ Ω	< 3.5 x 10 ⁷ Ω

Static Dissipative Insole

Product Code : DY6002

These static dissipative insoles provides extra cushioning for humans wearing conductive or static dissipative footwear, while offering superb resistance to ground.

- Sizes : 220 - 300 mm
- RTG < 35MΩ
- Excellent Electrical Properties

Resistance of Insole (ANSI/ESD STM9.1)	Resistance to Ground (ANSI/ESD STM97.1)
< $1.0 \times 10^9 \Omega$	< $3.5 \times 10^7 \Omega$



SH-INSOLE 2SIDE
A/S CANVAS

Static Dissipative Ultra Slip-Resistant Safety Shoe (PU/RUBBER) - S1P SRC

Product Code : DY6003



Brilliant choice for all kinds of slippery surfaces environments such as in food & catering industry, central kitchens, hotels, doctors & nurses of medical center & hospital.

- NBR Outsole with Patented & Unique Design
- Outstanding Slip Resistance, Excellent Grip Performance and Comfort
- Surpassing by 300% of CE Slip-Resistant Standard-SRC
- Composite Toe Cap
- Composite Mid Plate
- c/w SafetyKey Ortholite PU Insole
- Size: 36 - 47
- RTG < 35MΩ

Resistance of Shoes (ANSI/ESD STM9.1)	Resistance to Ground (ANSI/ESD STM97.1)
< $1.0 \times 10^9 \Omega$	< $3.5 \times 10^7 \Omega$



DY6003-HS611CC-WHITE / BLACK / NAVY BLUE-35M

Static Dissipative Safety Shoe (PU/PU) - S1 SRC



Product Code : DY6008

- Composite Toe Cap
- c/w Thick HI-POLY PU Insole
- Metal Detector Friendly
- Sizes : 36 - 47
- RTG < 35MΩ

Resistance of Shoes
(ANSI/ESD STM9.1)

< $1.0 \times 10^9 \Omega$

Resistance to Ground
(ANSI/ESD STM97.1)

< $3.5 \times 10^7 \Omega$



HS-354C-BLACK



HS-354C-WHITE



HS-354C-NAVY BLUE

Static Dissipative Safety Shoe (EVA/NBR) - S1P SRC



Product Code : DY6008

- Composite Toe Cap & Composite Midplate
- Light Weight Fly-Knitting Acrylic Upper
- EVA/NBR (Nitrile Rubber) Midsole/Outsole
- Chemical & Heat Resistance (HRO)
- Sizes: 36 - 47
- RTG < 35MΩ

Resistance of Shoes
(ANSI/ESD STM9.1)

< $1.0 \times 10^9 \Omega$

Resistance to Ground
(ANSI/ESD STM97.1)

< $3.5 \times 10^7 \Omega$



HS431C-GREY / BLUE-35M
c/w Anti-Bacterial, Anti-Odor, Anti-Fatigue PU Insoles



HS778C-35M
c/w SafetyKey Ortholite PU Insole

Static Dissipative Safety Shoe (NBR) - S1 SRC



Product Code : DY6008

- Composite Toe Cap
- c/w 3mm Thick High-Density Foam Insole
- Metal Detector Friendly
- Sizes : 230 - 300mm
- RTG < 35MΩ
- Nitrile Rubber (NBR) Outsole
- Chemical & Heat Resistance

Resistance of Shoes
(ANSI/ESD STM9.1)

< $1.0 \times 10^9 \Omega$

Resistance to Ground
(ANSI/ESD STM97.1)

< $3.5 \times 10^7 \Omega$



HS-354C-NAVY BLUE-RUBBER



HS-354C-WHITE-RUBBER

Static Dissipative Safety Shoe



Product Code : DY6008-HS690

This safety shoe is made of Black Sandwich Mesh & Black Microfiber PU Upper, SafetyKey Ortholite PU Insole, Wide Composite Toe Cap, Composite Midplate and Double Density PU/PU Midsole/Outsole.

- 200J Impact Resistance
- 15KN Compression Resistance
- 1100N Penetration Resistance
- Light Weight, Excellent Comfort
- Resistant to Fuel Oil (FO) and Most Chemicals
- Non-Marking, Slip Resistant (SR) & Ladder Grip (LG) Outsole



**Resistance of Shoes
(ANSI/ESD STM9.1)**

$< 1.0 \times 10^9 \Omega$

**Resistance to Ground
(ANSI/ESD STM97.1)**

$< 3.5 \times 10^7 \Omega$



HS690



Static Dissipative Safety Shoe (PU/PU) - S3 SRC



Product Code : DY6008

- Composite Toe Cap
- c/w SafetyKey Ortholite PU Insole
- Composite Midplate
- Metal Detector Friendly
- Sizes : 37 - 47
- RTG < 35M Ω



**Resistance of Shoes
(ANSI/ESD STM9.1)**

$< 1.0 \times 10^9 \Omega$

**Resistance to Ground
(ANSI/ESD STM97.1)**

$< 3.5 \times 10^7 \Omega$



HS-015-35M



Composite Midplate (Anti-Puncturing)

Static Dissipative Safety Shoe (PU/PU) - S3 SRC

Product Code : DY6008



- Steel Toe Cap
- Steel Midplate
- c/w SafetyKey Ortholite PU Insole
- Sizes : 36- 47
- RTG < 1G Ω

**Resistance of Shoes
(ANSI/ESD STM9.1)**

$< 1.0 \times 10^9 \Omega$

**Resistance to Ground
(ANSI/ESD STM97.1)**

$< 1.0 \times 10^9 \Omega$



HS-1102

Static Dissipative Safety Shoe

Product Code : DY6008



This safety shoe is made of Fly-knitting Polyester + TPU Heat Seal Upper, 3D-mesh Lining, EUROSTAT® PU Insole, Steel Toe Cap, Steel Midplate and Double Density PU/PU Outsole.

- 200J Impact Resistance
- 15KN Compression Resistance
- 1100N Penetration Resistance
- Light Weight, Excellent Comfort
- Resistant to Fuel Oil (FO) and Most Chemicals
- Non-Marking, Slip Resistant (SR) & Ladder Grip (LG) Outsole
- RTG < 1G Ω



HS-627

Electrical Hazard Safety Shoe

Product Code : DY6008-HS693

This safety shoe is made of Fire Retardant / Flame Resistant Brown Cow Crazy Horse Leather Upper, Waterproof Sock lining, Composite Toe Cap, Composite Midplate, Grey Mesh+Blue PU/Yellow Latex Insole, PU Midsole and Nitrile Rubber (NBR) Outsole (HRO) c/w Non-Metallic Shank and Rotary Automatic Buckle Shoes Laces System.



- 200J Impact Resistance
- 15KN Compression Resistance
- 1100N Penetration Resistance
- Hydrophobized upper (WPA)
- Outsole Resistant to Oil and Most Chemicals
- Outsole Resistant to hot contact (HRO)
- Non-Marking and Slip Resistant Outsole (SR)
- Whole footwear Water Resistance (WR)
- Energy absorption of seat region (E)



HS693-6IN-BROWN



HS693-8IN-BROWN

Static Dissipative Safety Boot (PU)

Product Code : DY6008 - SF8036



- Steel Toe Cap
- c/w GY AG-PU-INSOLE (ANTI-ODOUR)
- Sizes : 230 - 300mm
- RTG < 35MΩ



White

**Resistance to Ground
(ANSI/ESD STM97.1)**

< 3.5 x 10⁷ Ω

**Resistance of Shoes
(ANSI/ESD STM9.1)**

< 1.0 x 10⁹ Ω

**Surface Resistance of fabric
(ANSI/ESD STM11.11 & 11.12)**

10⁵ to 10⁶ Ω

Static Dissipative Insole

Product Code : DY6008



These static dissipative insoles provide an extra cushion for human wearing a conductive or static dissipative safety footwear for better comfort and yet achieving a good resistance to ground.

- Sizes : 36- 47
- RTG < 35MΩ
- Excellent Electrical Properties
- Machine Washable

**Resistance of Insole
(ANSI/ESD STM9.1)**

< 1.0 x 10⁹ Ω

**Resistance to Ground
(ANSI/ESD STM97.1)**

< 3.5 x 10⁷ Ω



GY AG-PU-INSOLE
(ANTI-ODOUR)



EUROSTAT PU INSOLE

FLOORING

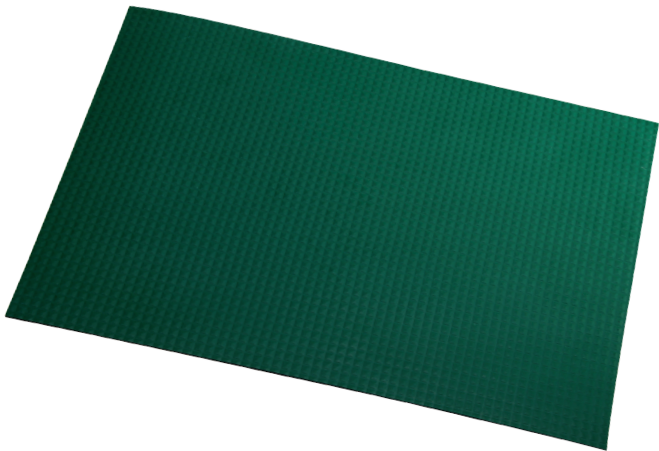
- Static Dissipative Anti-Slip Floor Mat
- Anti-Fatigue Floor Mat
- ESD Anti-Fatigue Mat
- Conductive Vinyl Tiles Product
- ESD Safe Acrylic Paint PLUS
- ACL Staticide Ultra Floor Finish
- ESD Safe Floor Restorer & Wax /Coat Stripper

Static Dissipative Anti-Slip Floor Mat

Product Code: DY1003-AS

Rubber Anti-slip mat comes with small diamond shape pattern.

- Thickness: 2mm
- Standard Dimension: 1m (width) and 10m (length)
Pre-cut size available for volume order
- Surface Resistance: $10^7 \Omega$



★ Highly recommended for use in conjunction with Dou Yee ESD SAFE Shoes

Anti-Fatigue Floor Mat

Product Code: DY1003-SH-BK/YW

These anti-fatigue floor mats come in standard sizes, and they can be strategically placed at individual workstations. It is made of durable static dissipative surface laminated with thick rubber foam base. The foam base provides relief for the feet without compromising on ESD protection requirements. Diamond-pattern embossed surface offers excellent traction. A yellow safety border is highly visible with the ESD logo embedded at corners to alert workers of ESD controlled areas. All edges are tapered for safety to prevent tripping.

Physical Properties	
Length x Width	910 mm x 610 mm 1840 mm x 610 mm
Thickness	20 mm
Colour	Safety Yellow / Black
Surface	Diamond Embossed (Anti Slip)
Grounding Cord	10 ft with Cord with Alligator Clip and Banana Jack



★ Highly recommended for use in conjunction with Dou Yee ESD SAFE Shoes

ESD Anti-Fatigue Mat

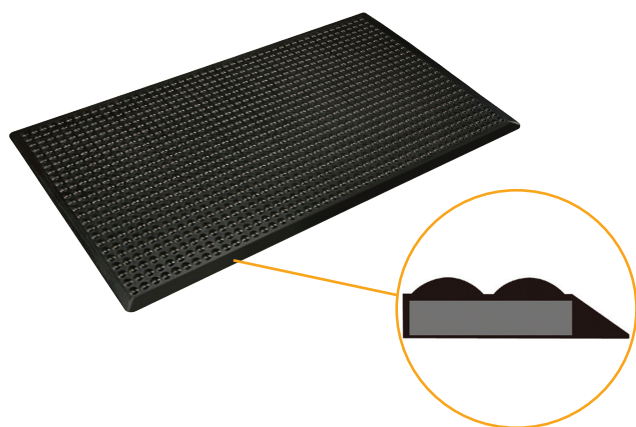
Product Code: DY1003-ESD-ANTIFATIGUE MAT

Conductive NBR material and high elasticity expanded PU provides perfect cushioning and excellent anti fatigue, high resistant to chemical abrasion and heat resistance function.

Relieving foot and back pain from standing for long time.

Physical Properties

Length x Width	600 mm x 450 mm 900 mm x 600 mm
Thickness	16 mm
Colour	Black
Surface Resistance	Resistance Point to Point $<10^9 \Omega$ Resistance to Groundable Point $<10^9 \Omega$



ESD Anti-Fatigue Mat

Product Code: DY1003-ESD-ANTIFATIGUE MAT (PU+TPU)

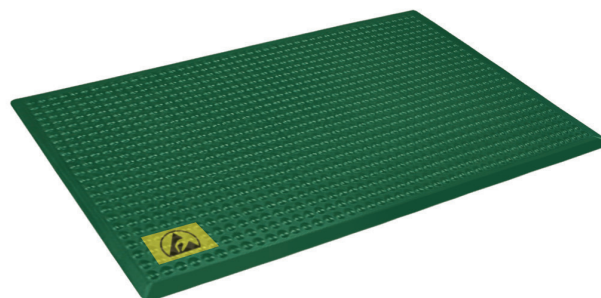
- Relieving fatigue and stress from long time standing.
- Increasing work quality and productivity.
- Reducing defectiveness, prevent safety-accident

PU Foam & TPU

- Preventing particle generation by using non carbon
- Permanent antistatic performance
- Material : ESD expanded PU/Thermoplastic Polyurethane

Physical Properties

Length x Width	600 mm x 450 mm
Thickness	16 mm
Colour	Green
Surface Resistance	Resistance Point to Point $<10^{10} \Omega$ Resistance to Groundable Point $<10^{10} \Omega$



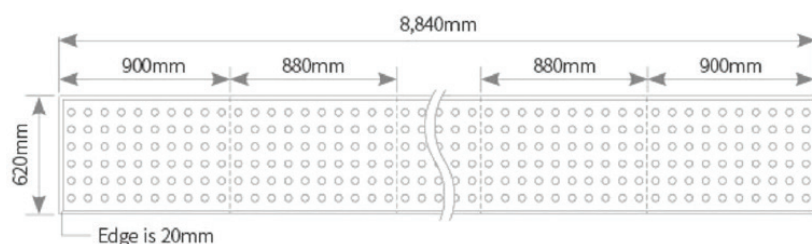
ESD Anti-Fatigue Mat

Product Code: DY1003-ESD-ANTIFATIGUE MAT-ROLL

Thickness : 16mm

Standard Dimension : 620 x 8,840 mm (include edges)

■ Anti-Fatigue Mat(Roll Type) Blueprint



Joining seam appearance

Conductive Vinyl Tiles Product

Product Code: DY1007-FT

The Flexco ESD Flooring is renowned in various industries for its high quality and durable conductive vinyl tiles. The high standards in manufacturing and strict quality testing enable us to provide lifetime warranty for the electrical properties of the tiles.

Applications:

- Electronics manufacturing, clean rooms, stores/warehouses, assembly, test and inspection, wafer or fiber optics fabrication
- Hospital surgeries, intensive care units, radiological facilities
- Computer/data processing installations, hard disk drive industries, access panels
- Explosive environments, munitions facilities, chemical processing
- Pharmaceutical, medical device manufacturing

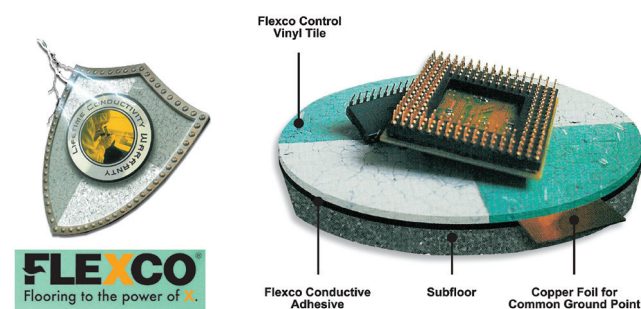
Material: Conductive Vinyl

Available Sizes: 1ft X 1ft / 2ft X 2ft / 3ft X 3ft

Available Thickness: 2mm / 3mm

Accessories: Conductive 2-part Epoxy Adhesives/ Welding Bead/Copper Grounding Foil

Electrical Resistance: 25K Ω to 1M Ω



★ Detail Specifications and ESD Flooring consultation and Certification services available upon request.

ESD Safe Acrylic Paint PLUS

Product Code: DY1007-ACL-6700

This single-part system is an economical alternative to ESD epoxy or ESD tile that will save you money in material and labor related expenses. Trouble-free to install and maintain, this full-bodied paint allows for effortless mixing and application. Its rich viscosity ensures even distribution of conductive material and supreme coverage that leaves a nice sheen.

This water-based acrylic vinyl coating is available in dissipative or conductive resistances. Suitable for interior concrete floors, walls, metal and wood surfaces. Color options allow for demarcating ESD work areas and for specific applications. Made in USA.

- Various colors available with flat matte finish
- Static Dissipative Formula: $10^7 - 10^9 \Omega$ when tested according to ANSI/ESD STM7.1
- Conductive Formula: $10^4 - 10^6 \Omega$ when tested according to ANSI/ESD STM7.1
- Appropriate for facilities following ANSI/ESD S20.20.

Product #6700: Gallon Pail

Product #6700: 5-Gallon Pail



ACL Staticide®

★ Detail specifications available upon request

ACL Staticide Ultra Floor Finish

Product Code : DY5400-ACL-4600

Staticide® Ultra Floor Finish is designed for good electrical properties, physical longevity, and gloss. This urethane-enhanced formula feature superior abrasion resistance and durability, fortifying floors with a long-lasting protective layer that is shiny and ESD-safe for 12 to 24 months.

- Coverage: 1,500-2,000 square feet per gallon
- Non-toxic
- Biodegradable
- Strip cycle: 12-24months
- Suitable to use on vinyl, linoleum, and ceramic tiles
- Surface Resistance: 10^7 - $10^9 \Omega$



ESD Safe Floor Restorer & Wax / Coat Stripper

Product Code: DY5400-ACL-4100

Staticide® Restorer Cleaner renews gloss and prolongs strip cycles on dissipative floor finishes. Using a special conductive ingredient, Staticide® Restorer cleans while simultaneously breaking down electrical discharge. This non-abrasive, biodegradable formula does not contain harmful chemicals like ammonia phosphates or alkali. It is tough enough to remove black heel marks, yet gentle enough to return floors to safe specification. Made in USA.

- Coverage: 1000 - 1500 sq. ft. per gallon (approximately)
- Static dissipative: 10^7 - $10^9 \Omega$ average at 100V
- Dilution ratio: 1:10 (1 part cleaner to 10 parts water)
- Solids: 25%
- Low odor
- Suitable for heavy-duty cleaning on Staticide® static dissipative floor finishes and dissipative tile.



Product #4100-1: Gallon Bottle
Product #4100-5: 5-Gallon Pail
Product #4100-2: 54-Gallon Drum

Product Code: DY5400-ACL-4010

Staticide® Anti-Static Stripper provides a completely clean and finish-ready surface by emulsifying dirt and residual particles of old wax or coating. Effective in hard or soft water, this biodegradable, low-foaming formula removes multiple coats of wax, synthetic floor finishes and embedded dirt without damaging or dulling floors. Made in USA.

- Coverage: 5000sq.ft.per gallon (approximately)
- Dilution ratio: 1:4 (1 part stripper to 4 parts water)
- Non-toxic
- Biodegradable

Product #4010-1:
Gallon Bottle / 4 gallons per case
Product #4010-5:
5-Gallon Pail
Gallon Bottle / 4
Gallons per case
Product #4010-2:
54-Gallon Drum



★ Detail specifications available upon request

ACCESSORIES

- Antistatic Laminating Pouch
- Static Dissipative Document Holders
- Antistatic Page Holders / Card Holders
- ESD Safe Stationaries
- 4030 Staticide® Neutral Cleaner
- ACL Staticide Mat & Table Top Cleaner
- ACL Staticide Hi Tech Hand Lotion
- ACL Staticide Spray General Purpose
- ESD Safe Waste Bin

Antistatic Laminating Pouch

Product Code : DY3007

Laminating pouch is constructed using high quality pretrimmed polyester/ Permanent antistatic EVA material. Simply laminate your documents/ work instructions, calibration certificates/ ESD signs between the pouch for ESD sensitive work area usage.

- Surface Resistance: $10^9 - 10^{11} \Omega$
- Size: A3 and A4 available



Laminating pouch

Static Dissipative Document Holders

Product Code : DY3007

Static dissipative A4 ring binder is ideal for ESD control environments for records management and document control.

- Various size/thickness are available
- Surface Resistance: $10^6 - 10^9 \Omega$



A4 Ring Binder

Antistatic Page Holders / Card Holders

Product Code : DY3007

Antistatic page protectors / cardholder contains stable properties and non-contaminating surface, making it suitable for stringent cleanroom environment.

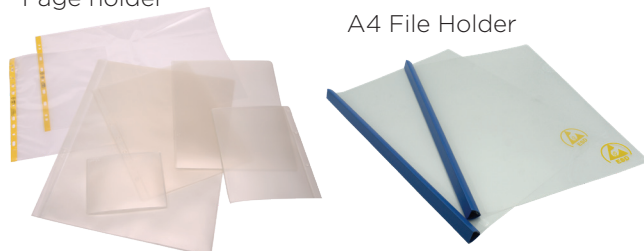
- Rigid and flexible holder available
- ESD clip for Badge holder available
- All designs come with permanent ESD logo
- Surface Resistance: $10^6 - 10^{11} \Omega$
- Size: A4, A5 and A6 available (for Card/Page Holder)

Card / Badge Holder



Page holder

A4 File Holder



ESD Safe Stationeries

Product Code : DY3007-SD

Standard office stationeries are often made using materials that generates static and unintentionally becomes source for ESD damage. Static dissipative grade stationeries are used in EPA environment to avoid ESD discharge occurrence.

- Surface Resistance: $10^5 - 10^{11} \Omega$



4030 Staticide® Neutral Cleaner

Product Code: DY5400-NEUTRAL
CLEANER-4030

Versatile and Economical

Staticide® Neutral Cleaner is a low-foaming, multi-purpose maintenance cleaner. There is no filming or streaking when cleaning with this unique formula, making it the perfect product for any type of facility, including ESD-safe areas.

This non-abrasive cleaner contains no silica and will not degrade the anti-static properties of production environments. It is ideal for use on ESD tiles, conductive floors, 4700SS Diamond Polyurethane ESD paint, and 5700 Staticide® Premium ESD Paint.

Environmentally friendly, this neutral formula is safe for septic and sewage systems. It is non-toxic and biodegradable, has a neutral pH, and contains no phosphates or alkalis.

Staticide® Neutral Cleaner is available in two formulas: 4020 Concentrate or 4030 Ready to use.



ACL Staticide Mat & Table Top Cleaner

Product Code : DY5400-ACL6001/6002

ACL Mat & Table Top Cleaner is a multi-purpose neutral cleaner that is designed for production areas. It is the ideal cleaner for areas in which static-sensitive devices are assembled, tested, and handled, but can also be used in areas that require a mild but effective cleaner.

This non-abrasive formula is safe to use on workstations, tabletops and anti-static mats (rubber and vinyl). It effectively removes flux residues, oily fingermarks, grease, nicotine, dirt, grime and inorganic contaminants. It also removes dirt on table mats and other antistatic mats without degrading the surface's antistatic properties.



ACL Staticide Hi Tech Hand Lotion

Product Code: DY5400

Long working hours in controlled environments and prolong exposure to chemical/ gloves often result in skin irritation, dryness and flaking.

Moisture on the skin is also vital to ensure performance of personal grounding, especially on the bonding between the skin and wrist strap.

Hi Tech Hand Lotion is suitable to reduce hand dryness, improves contact between wrist strap and skin and on top of it all minimize contamination in ESD control environment.

- Scent free
- No Glycerin/Silicone/lanolin or mineral oil
- Quick absorption to skin with minimal contamination to work surface



ACL Staticide Spray General Purpose

Product Code : DY5400-ACL-2001/2003

ACL Staticide® is an inexpensive, easy-to-use topical antistatic solution and it is a highly-effective method for long-term static control. It is widely used in a broad range of industries, as well as in the office. Available in several different formulations, Staticide is packaged in gallons or ready-to-use quart bottles with spray nozzles.

It is easily applied on walls, ceilings, floors, carpets, fixtures, work surfaces, tools and equipment, conveyor belts, clothing and other materials. On a hard surface, one gallon of Staticide will cover several thousand square feet, and last from weeks to months, depending on the application.



ESD Safe Waste Bin

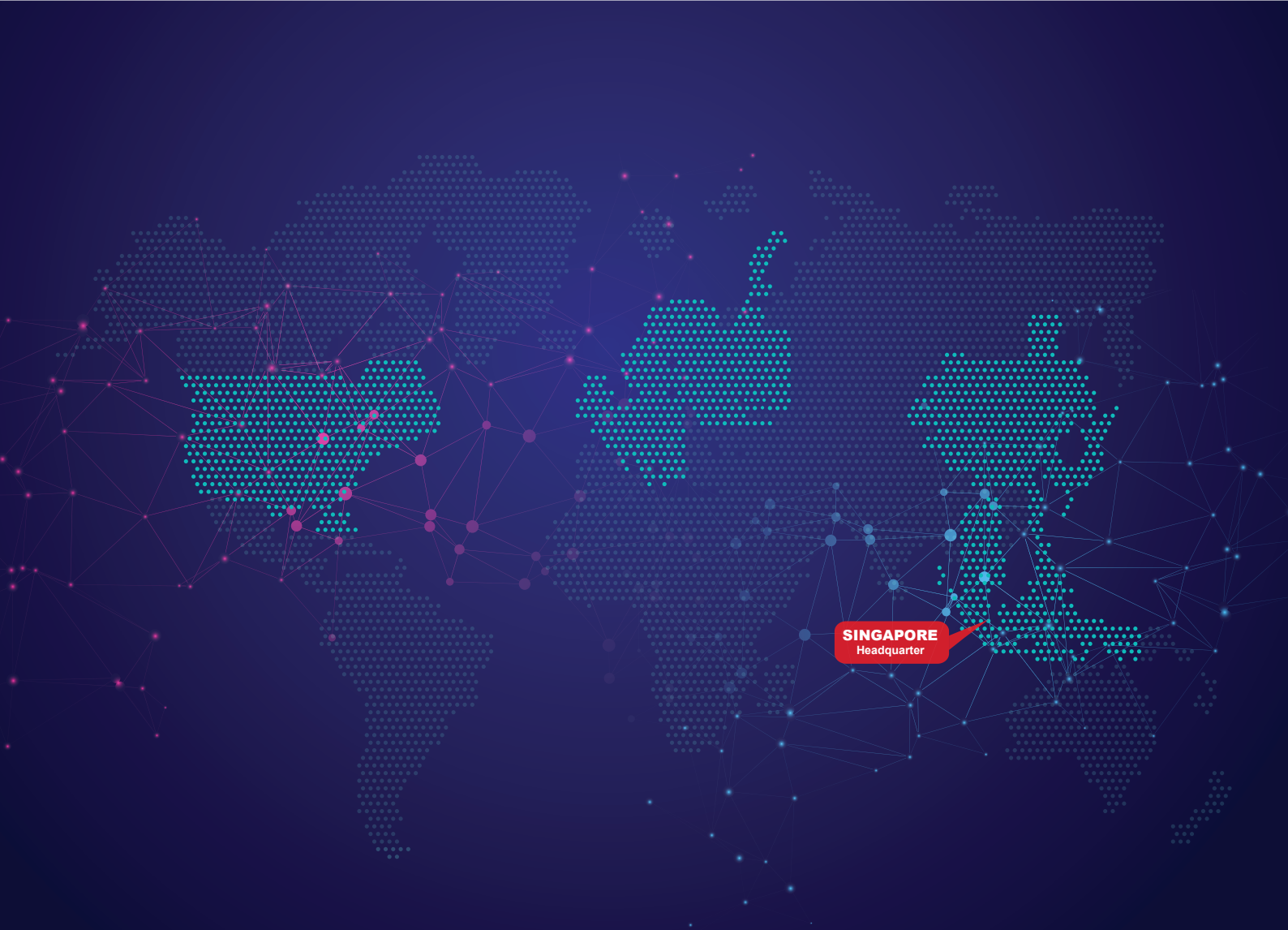
Product Code : DY3007-WASTE BIN-ESD SAFE

ESD-safe waste bins that are molded using homogeneous ESD-safe Polypropylene material. These waste bins are suitable to be placed in Electrostatic Protected Area.

- Surface Resistance $< 1 \times 10^9 \Omega$ (ANSI/ESD STM11.11)
- Come with cover or without cover.
- Available in various in different capacities.
- Color : Black



Notes



**More than 46 offices across
*North America, Europe and Asia Pacific***

- Manufacturing Plants -

Singapore • Malaysia • China • France • Poland



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